

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Amendment of Part 90 of the Commission's Rules	)	WT Docket No.05-62
to Provide for Flexible Use of the 896-901 MHz	)	
and 935-940 MHz Bands Allotted to the Business	)	
and Industrial Land Transportation Pool	)	
	)	
Oppositions and Petitions for Reconsideration of	)	DA 04-3013
900 MHz Band Freeze Notice	)	
	)	

**COMMENTS OF  
PCIA – THE WIRELESS INFRASTRUCTURE ASSOCIATION**

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On February 16, 2005, the Federal Communications Commission (“FCC” or “Commission”) issued a Notice of Proposed Rulemaking (“NPRM”) seeking comment on flexible use of the 900 MHz band.<sup>1</sup> More specifically, the Commission sought comment on competitive bidding and a geographic area licensing scheme to

“facilitate the provision of telecommunications services to consumers by eliminating unnecessary regulatory restrictions, and thereby [providing] greater flexibility in deploying the spectrum to respond to evolving market demands.”<sup>2</sup>

With these comments, PCIA – the Wireless Infrastructure Association (“PCIA”) generally supports the Commission’s proposals, but additionally recommends that the Commission set aside a reasonable portion of channels in the 900 MHz band for non-auctioned access and that the FCC and industry consider and agree on required interference protections to 900 MHz licensees as quickly as feasible.

## **I. Statement of Interest**

PCIA is a national trade association representing the interests of entities that develop, own, manage and operate over 50,000 towers, commercial rooftops and other facilities for the provision of wireless, broadcast and other telecommunications services. In addition, PCIA is a leading FCC-certified frequency advisory committee certifying and sending thousands of applications per year to the Commission for commercial and private land mobile station authorizations in the 27-43 MHz, 150-174 MHz, 421-512 MHz, 800 MHz, 900 MHz, 929 MHz paging and 1.4 GHz bands. PCIA’s advocacy activities

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<sup>1</sup> See *Amendment of Part 90 of the Commission’s Rules to Provide for Flexible Use of the 896-901 MHz and 935-940 MHz Bands Allotted to the Business and Industrial Land Transportation Pool, Oppositions and Petitions for Reconsideration of 900 MHz Band Freeze Notice, Notice of Proposed Rulemaking and Memorandum Opinion and Order, WT Docket No. 05-62, DA 04-3013 (rel. Feb. 16, 2005) (NPRM)*.

<sup>2</sup> NPRM at ¶ 1.

involve assisting the Commission, industry, and all levels of government in fulfilling their Congressional directive under the Telecommunications Act to provide wireless services to the nation.

To advance wireless service deployment, PCIA generally supports auctions for commercial services. Auctions, when engineered appropriately, provide an incentive to bidders to deploy service expeditiously. The intensive use of capital to secure spectrum through an auction mechanism should drive winning bidders to deploy a viable spectrum-based telecommunications service as quickly as possible to optimize their potential for a return on their investment. As the Commission notes, “geographic area licensing [through auction] permits economies of scale” and “reduces regulatory burdens and transaction costs;” these “economic efficiencies of flexibility” will foster “technology development and investment in communications services and systems.”<sup>3</sup>

On the other hand, PCIA also understands the need for non-auctioned access to some channels to be utilized for daily business operations.<sup>4</sup> Drawing upon our vast experience as one of the largest land mobile frequency coordinators for a wide variety of users, PCIA gains insight on a daily basis, through its application certification procedures, into the systems deployed to maintain American business success. As will be justified in more detail below, PCIA supports continued non-auctioned, coordinated access to 40 channels as a reasonable portion of the 900 MHz channels for the future needs of private, internal systems.

PCIA is uniquely situated to assist the Commission in developing its vision for the future use of 900 MHz channels, and in particular, supporting its desire to “strike a

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<sup>3</sup> NPRM at ¶¶ 13, 18.

<sup>4</sup> These requirements can be substantially different than the commercial radio service offerings the auction is designed to promote.

fair and equitable balance between the interests of incumbent [business and industrial land transportation (B/ILT)] licensees and those seeking to provide geographic service.”<sup>5</sup> In these comments, PCIA endeavors to find the most efficient mix of auctioned and non-auctioned channels at 900 MHz for expedited deployment of wireless services to the public, as well as business and industry sectors.

## **II. The Commission Should Set Aside a Reasonable Portion of Channels in the 900 MHz Band for Non-Auctioned Access**

Incumbent licensees will doubtless require some additional channels for system capacity growth at varying points in the future. In addition, businesses (and in particular small businesses) seeking an exclusive, geographically limited service area can only look to 900 MHz today for such characteristics to support private, internal business use systems. To meet these spectrum needs, the FCC should set aside 40 channels (“exempt channels”) for non-auctioned, coordinated access, and auction the non-exempt channels for expedited deployment of wireless services. This set aside equates to 20% of the channels proposed in the NPRM for auction.

The Commission should also consider construction requirements and/or other performance evaluation mechanisms to ensure service deployment. In the meantime, pending applications should be processed under the rules that governed those applications when they were filed.

### **A. Incumbents Require Additional Channels with a Limited Geographic Coverage Area for Future Growth of 900 MHz Systems**

Licensees who invested in 900 MHz business channels acquired the spectrum and constructed a system under the critical assumption that the 900 MHz band will continue to provide an accessible pool of channels for future system growth. Should the

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<sup>5</sup> NPRM at ¶ 4.

Commission determine that the entire 900 MHz band would best be licensed through auction, the ability to acquire spectrum from the Commission would be taken away from incumbents barring successful participation at auction.

The value proposition of acquiring spectrum at auction is derived through the very use of that spectrum for a commercially viable service. Those seeking the spectrum at auction for private, internal use usually cannot value the spectrum itself as highly as those building a business model on revenue generated directly from the spectrum.

Even if one were to argue that the secondary market remains available after the spectrum is auctioned, the cost of acquisition at the auction for the intended deployment of a commercial communications solution, coupled with a second transaction cost, will likely increase the cost of the spectrum in the secondary market to a cost-prohibitive point for would-be non-commercial spectrum users.

Beyond the financial challenges of participating at auction, the communications needs, including future spectrum requirements, of companies cannot be “synchronized” in time to meet the one-time FCC auction of a band. Moreover, the market size of auctioned spectrum is usually a barrier to participation. Most incumbent licensees have licenses within relatively small geographic areas of operation around 70 miles or less, and would have difficulty justifying the acquisition of spectrum at auction that extends well beyond desired coverage areas.

Most licensees who have employed 900 MHz solutions for private, internal business use will require some spectrum that can be cost-effectively obtained for future growth of their 900 MHz operations in their limited geographic coverage area. This need

can be ensured by a small set-aside of 40 channel pairs for continued assignment through the “pre-freeze” license processes.

**B. 900 MHz Remains the Only Exclusive-Use Spectrum Available for Licensees that Cannot Participate at Auction**

License opportunities for exclusive, private and internal business use, as permitted in the 900 MHz band, are scarce in today’s regulatory environment. Channels in the 150-174 MHz and 421-470 MHz bands are available for private, internal business use, but are shared and in most geographic areas already saturated. Channels in the 470-512 MHz range are available for private, internal business use licensing with an exclusive service area in only 11 markets. These markets offer virtually no availability for new licensing today.

Likewise, the 800 MHz band offers little, if any, spectrum opportunities for private, internal business use. Most spectrum at 800 MHz has either already been auctioned or will be available to public safety licensees exclusively for three years following the completion of the 800 MHz reconfiguration. The spectrum will then be available only to critical infrastructure and public safety licensees for two years following exclusive public safety access. Business applicants may be offered limited spectrum access several years from now, but realistically cannot assume any spectrum availability at 800 MHz following reconfiguration.

The 900 MHz band, therefore, remains as the only exclusive-use spectrum available for private, internal uses for licensees, such as small business entities, whose participation at auction would be impracticable or financially untenable.

**C. The Commission Should Set Aside 40 Exempt Channels, or 20 Percent of Business and I/LT Channels Nationwide, for Non-Auctioned, Coordinated Access, While Auctioning Non-Exempt Channels for the Expedient Deployment of Wireless Services**

To accommodate the future spectrum and radio system growth needs of the American business community, PCIA recommends that the Commission set aside a reasonable portion of channels in the 900 MHz band for non-auctioned access. PCIA has sought to effectively balance the competing interests of auction potential with the need to hold a limited number of channels in abeyance for future growth opportunities related to private, internal systems. We believe the Commission would most effectively balance these interests by exempting 40 channels, only 20 percent of business and I/LT channels, for non-auctioned, coordinated access. In fact, PCIA would support the Commission's option to reserve the upper four blocks of ten channels for business and industrial use, although the Commission should clarify that these blocks will continue to be licensed on a site-specific basis under "pre-freeze" 900 MHz licensing rules.<sup>6</sup>

Should the Commission choose to find alternative channels to set aside for business and industrial use, PCIA would note that the greatest demand for business or industrial channels in recent years has been for trunked business use, as the Commission recognized in its NPRM.<sup>7</sup> This significant increase in demand stands as unequivocal support for a business set-aside, and might suggest that exempt channels be extracted from the former business pool to support the future growth of the fastest growing group of affected 900 MHz incumbents.

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<sup>6</sup> NPRM at ¶ 30, stating "Commenters might...consider the option of dedicating the upper four channel blocks (*i.e.*, QQ, RR, SS, TT) to traditional B/ILT services."

<sup>7</sup> NPRM at ¶ 10.

Moreover, the effect of a limited set aside, as proposed, would be negligible at best on an auction of 900 MHz channels, as 80% of business and industrial channels could be auctioned in all markets to the highest bidder. PCIA hopes and expects that the winning bidder in each case would quickly develop plans and deploy wireless telecommunications services to the public following successful auction participation.

**D. The Commission Should Eliminate Loading Requirements and Instead Ensure System Deployment through Construction Criteria and/or Performance Evaluations**

In its NPRM, the Commission sought comment on whether loading requirements should be retained or eliminated for incumbent 900 MHz operations.<sup>8</sup> PCIA believes that loading requirements are an ineffective methodology to ensure system deployment and limit speculative spectrum acquisition, as many licensees typically indicate just enough mobile units on a license to justify the need for additional channels.

A more effective solution to limiting speculative activities and ensuring system deployment in the 900 MHz band would be to require notification of construction to the Commission after a system has been constructed and service has been initiated. In fact, mandatory construction notification requirements are consistent with deployment requirements in other Part 90 land mobile bands. The Commission may also consider requiring a certified statement demonstrating substantial service has been deployed. These notification processes are more likely to ensure system deployment and will hold licensees accountable through certified statements, which carry serious liabilities if determined fraudulent.

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<sup>8</sup> NPRM at ¶ 52.



**E. The Commission Should Process Pending Applications Filed Prior to the 900 MHz Freeze Under the Rules that Governed Those Applications When Filed**

Many applications for 900 MHz channels were filed prior to the freeze on new 900 MHz operations, and remain pending at the Commission. PCIA supports the Commission's statement that "all 900 MHz band applications for new licenses...will be processed in the normal course."<sup>9</sup>

**III. The Commission and Industry Must Consider and Agree on Required Interference Protections for 900 MHz Licensees**

As noted in the NPRM, "licensees may be faced with the same interference problems that necessitated the remedies adopted in the 800 MHz [Report and Order] unless equivalent interference abatement requirements are established at 900 MHz."<sup>10</sup> While it seems that most claims of interference at 900 MHz are anecdotal and undocumented at this time, PCIA believes there is a potential risk of similar interference problems experienced at 800 MHz for 900 MHz licensees and agrees with the Commission's view that incompatible system designs could lead to harmful interference for both incumbents and auction winners. PCIA is particularly concerned for its small business customers who, similar to 800 MHz public safety licensees, do not have the financial or technical resources required to deploy robust, interference-resistant systems. Given uncertainty, the cost of addressing and resolving interference after it occurs, and the high stakes associated with a problem, PCIA urges interested industry parties in the 900 MHz band to convene and reach consensus on appropriate interference protections in advance of more extensive deployment.

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<sup>9</sup> NPRM at ¶ 67.

<sup>10</sup> NPRM at ¶ 35.

#### **IV. Conclusion**

As indicated herein, PCIA recommends that the Commission exempt 40 channels, or 20 percent of the 900 MHz business and I/LT channels, from an auction of 900 MHz business and I/LT channels, and supports the auction of the bulk of the band for the expeditious deployment of wireless services to the public. This channel allocation would be the most efficient mix of spectrum licensing options to balance the competing interests of broad and rapid deployment of wireless services, and the critical need for a limited number of channels for the legitimate growth of private, internal business use systems. Finally, PCIA urges the Commission and industry to quickly consider and agree on required interference protections for 900 MHz licensees to avert the potential for harmful interference.

Respectfully Submitted,

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